Laudatio for Martin Zobel

by Meelis Pärtel

It is an honour to introduce my colleague Martin Zobel today. He was born in 1957 in Tallinn, Estonia. His family lived on the outskirts of the city, and they used to spend as much time as possible in nature. Family legend has it that at four years old, Martin already informed his parents that he would become a naturalist. As a schoolboy, he collected insects, organised nature trips for other children in the neighbourhood, and was a keen reader of popular scientific journals and books. On one occasion, a teacher at his high-school suggested making a small student project about Estonian alvar grasslands – calcareous grasslands where the soil layer above the limestone is around only 10 cm. This very first research work steered him – fortunately for us – towards vegetation science. When Martin started his studies at the University of Tartu, Professor Hans Trass encouraged his focus on alvar grasslands as a unique and threatened habitat type. Ultimately, they became the topic of Martin’s doctoral thesis, supervised by Trass, and much of his subsequent research has focused on calcareous grasslands.

Estonian plant ecology has been fortunate to have many exceptional scientists who have motivated subsequent generations of colleagues. The Estonian school of plant ecology emerged before the Second World War when Professor Teodor Lippmaa developed bold theoretical views about vegetation structure and initiated detailed vegetation mapping of the country. During the second half of the last century, many excellent scientists studied plant ecology in Estonia. Even if Estonia was then behind the Iron Curtain, the botany department was like a refugium, preserving the values and traditions of free academic thinking. Eddy van der Maarel and many other colleagues from the free world were very supportive and sent numerous reprints and books. As soon as possible, Estonian plant ecologists established tighter contacts with the international scientific community, and Martin put great effort into fostering this and actively involved younger colleagues, including me. When Estonia restored its independence, Martin worked hard to contribute to reforms in the national science system. For many years

© R. Kokk
he was the head of a major science funding committee in Estonia. For this work, the Order of the White Star was bestowed upon him by the Republic of Estonia.

Martin Zobel became active within the IAVS as soon as it was possible to get permission to travel outside the Soviet Union in the late 1980s. His first international meeting was the 32nd Symposium of the IAVS in 1989 in Sweden. Martin has now been a council member in our association for three decades and has also served as Vice President, taking particular care of the funding scheme to support our members. From his own experience, he knows how important such international support can be. For years, Martin has also served us as an Associate Editor or Editorial Board member of the Journal of Vegetation Science.

Martin Zobel started working at the University of Tartu straight after graduating in 1980. As a small country, Estonia has only one long-established university, which in former times was the only place to pursue an academic career. Martin has been a research assistant, university lecturer, and, from 1992, Professor of Plant Ecology. Several times he has been head of the department. Even though he has received invitations for professorships from universities abroad, he has decided to stay at his Alma Mater. Clearly, this has been motivated by a sense of responsibility to foster the Estonian school of plant ecology, especially knowing the huge efforts made by his predecessors during difficult times. Nevertheless, he has served as a visiting professor at universities in Uppsala, Copenhagen and elsewhere.

Martin Zobel is a highly respected teacher. He can explain complex ecological theories but also has vast practical skills. His field trips to teach vegetation types, soil types, or grass and sedge species identification are popular among students and colleagues alike. He has supervised more than 20 PhD and master theses. Some of his former PhD students have themselves become professors, and he even has recently elected professors among his “academic grandchildren” – former students of his former students.

Martin Zobel’s scientific interests are mainly related to species coexistence in order to understand variation in biodiversity. He has brilliant ideas for developing ecological theory and is unafraid to deviate from mainstream views. For example, the species pool concept, which Martin has helped to develop, emphasises the regional availability of taxa to colonise sites with specific ecological conditions and has challenged the view that competition dictates diversity in ecological communities. Moreover, Martin

Martin with professor Hans Trass in the field, 1989. Photo from the private archive of Martin Zobel.

Martin Zobel and Mari Moora, 1993. Photo from the private archive of Martin Zobel.
has highlighted the importance of positive interactions in ecological communities. In his view, vegetation is composed of plants as holobionts – larger organisms along with their intimate microbial mutualists, such as mycorrhizal fungi. Thus, we must also examine the microbes to understand how plant species live together. He has made pioneering work to identify mycorrhizal fungi from plant roots and soil using up-to-date molecular methods and to describe global relationships.

Another important aspect of Martin Zobel’s work is vegetation dynamics, both natural succession and human-caused changes, including the formation of novel and hybrid ecosystems. He has often argued for solid ecological knowledge to provide the basis for nature conservation and restoration. A special focus of his has been on semi-natural plant communities – a label that is particularly familiar in Europe, describing ecosystems with native species that have developed over millennia under moderate but relatively constant human influence, mostly grazing with domestic animals and cutting hay. However, cultural burning, well known in Australia, is a very similar phenomenon. Long-term coexistence of humans and nature can, in this way, result in very species-diverse and well-functioning ecosystems, alvar grasslands being a good example. Knowing that human influence is reaching almost every location on Earth, work on semi-natural communities might inform us how to manage vegetation in ways that are most friendly to biodiversity.

Martin has evidently learned from his research that mutualistic interactions can be more powerful in a community than harsh competition – colleagues appreciate the warm and positive work atmosphere he has promoted, both as a group leader and a colleague. His wide knowledge of art, literature and music, and a good sense of humour, has made him excellent company during field work and social gatherings.

Martin Zobel has been elected as a fellow of the Academy of Sciences of Estonia. Three times he has received the state annual science award. Now, our organisation has recognised Martin Zobel as the 2023 recipient of the Honorary Membership Award of the International Association for Vegetation Science – the highest recognition our society can give to a member.